002813 USA MY 02/ETCH/SILICON/JB1 'Application No: 09/610,237 Page 2 of 36

## IN THE SPECIFICATION

Please substitute the following paragraph for the corresponding original paragraph.

In the paragraph bridging pages 9 through 10:

The semiconductor processing apparatus 20 and process monitoring system 25 of the present invention is useful for fabricating integrated circuits on a semiconductor substrate 30. The processing apparatus 20, as schematically illustrated in Figure 1, comprises a process chamber 35 having a process zone 40 for processing the substrate 30, and a support 45 for supporting the substrate 30 in the process zone 40. An electrostatic chuck 50 holds the substrate 30 on the support 45 during processing of the substrate 30. The process zone 40 surrounds the substrate 30 and typically comprises a volume of about 10,000 to about 50,000 cm<sup>3</sup>. The process chamber 35 can comprise a ceiling 55 that is adapted to face the substrate 30, and that comprises a flat rectangular shaped ceiling 55, or a ceiling which is arcuate, conical, dome-shaped, or multi-radius dome-shaped. Preferably, the ceiling 55 is dome-shaped to enable a gas energizer 60 to uniformly couple power across the entire volume of the process zone 40 thereby providing a more uniform density of energized gaseous species across the substrate surface than a flat ceiling 55.